

WHAT IS CLAIMED IS:

1. A unitary spring system end cap for supporting an article, comprising:  
a platform portion adapted to support at least a portion of the article; and  
a sidewall structure having a length and including:  
an inner wall connected with said platform portion,  
an outer wall forming an acute angle relative to said platform portion,  
at least one spring system connected between said inner wall and said outer wall,  
said spring system including at least one bellows, and  
at least one rib protruding from said outer wall.
2. The unitary spring system end cap as recited in claim 1, wherein each of the at least one spring systems is operably connected with at least one rib.
3. The unitary spring system end cap as recited in claim 2, wherein an outer face of each of the at least one ribs is formed along a plane perpendicular to a plane formed by said platform portion.
4. The unitary spring system end cap as recited in claim 3, wherein when the at least one rib is impacted, the at least one rib can engage the at least one spring system.
5. The unitary spring system end cap as recited in claim 1, wherein said sidewall structure includes a plurality of said spring systems formed end to end, wherein each spring system is connected with said outer wall along a ridge forming a plurality of arcs connected end to end

along the length of said sidewall structure.

6. The unitary spring system end cap as recited in claim 5, wherein each of the at least one spring systems is operably connected with a rib.

7. The unitary spring system end cap as recited in claim 6, wherein an outer face of the rib is formed along a plane perpendicular to a plane formed by said platform portion.

8. A unitary spring system end cap for supporting an article, comprising:  
a platform portion adapted to support at least a portion of the article; and  
a plurality of sidewall structures each having a length and including:  
an inner wall connected with said platform portion,  
an outer wall forming an acute angle relative to said platform portion,  
at least one spring system connected between said inner wall and said outer wall,  
said spring system including at least one bellows, and  
at least one rib protruding from said outer wall.

9. The unitary spring system end cap as recited in claim 8, wherein each of the at least one spring systems is operably connected with at least one rib.

10. The unitary spring system end cap as recited in claim 8, wherein an outer face of each of the at least one ribs is formed along a plane perpendicular to a plane formed by said platform portion.

11. The unitary spring system end cap as recited in claim 10, wherein when the at least one rib is impacted, the at least one rib can engage the at least one spring system.

12. The unitary spring system end cap as recited in claim 7, wherein each of the plurality of sidewall structures includes a plurality of said spring systems formed end to end, wherein each spring system is connected with said outer wall along a ridge forming a plurality of arcs connected end to end along the length of said sidewall structure.

13. The unitary spring system end cap as recited in claim 12, wherein each of the at least one spring systems is operably connected with a rib.

14. The unitary spring system end cap as recited in claim 13, wherein an outer face of the rib is formed along a plane perpendicular to a plane formed by said platform portion.

15. A unitary spring system end cap for supporting an article, comprising:  
a platform portion adapted to support at least a portion of the article;  
at least one bulbous indentation formed in said platform portion; and  
a sidewall structure having a length and including:  
an inner wall connected with said platform portion,  
an outer wall forming an acute angle relative to said platform portion, and  
at least one spring system connected between said inner wall and said outer wall,  
said spring system including at least one bellows.

16. The unitary spring system end cap as recited in claim 15, wherein when said platform portion is impacted the at least one bulbous feature is adapted to collapse.

17. The unitary spring system end cap as recited in claim 16, comprising two bulbous features formed such that each of the bulbous features are centered along a minor axis of the platform portion and symmetrically spaced about a center of the platform portion along a major axis of the platform portion.

18. The unitary spring system end cap as recited in claim 16, wherein each of the bulbous features is formed such that the platform collapses away from a fragile portion of the article.

19. A unitary spring system end cap for supporting an article, comprising:

a platform portion adapted to support at least a portion of the article;

at least one bulbous indentation formed in said platform portion; and

a sidewall structure including:

an inner wall connected with said platform portion,

an outer wall forming an acute angle relative to said platform portion,

at least one spring system connected between said inner wall and said outer wall,

said spring system including at least one bellows, and

at least one rib protruding from said outer wall.

20. A system for supporting an article, comprising:

a first end cap including:

a first platform portion adapted to support a first portion of the article;

a sidewall structure having:

a first inner wall connected with said first platform portion and surrounding the periphery of said first platform portion;

a first outer wall forming an acute angle relative to said first platform portion and surrounding the periphery of said first inner wall;

at least one first spring system connected between said first inner wall and said first outer wall, each of said at least one first spring system including at least one bellow; and

at least one first rib protruding from said first outer wall; and

a second end cap including:

a second platform portion adapted to support a second portion of the article;

a sidewall structure having:

a second inner wall connected with said second platform portion and surrounding the periphery of said second platform portion;

a second outer wall forming an acute angle relative to said second platform portion and surrounding the periphery of said second inner wall;

at least one second spring system connected between said second inner wall and said second outer wall, each of said at least one second spring system including at least one bellow; and

at least one second rib protruding from said second outer wall.

21. The system of claim 20, wherein each of the at least one first rib and the at least one second rib has an outer face substantially perpendicular to a plane formed by one of the first and second platform portions.

22. The system of claim 20, further comprising:

at least one first bulbous structure formed on the first platform portion; and

at least one second bulbous structure formed on the second platform portion.

23. A system for supporting a laptop computer, comprising:

a first end cap including:

a first platform portion adapted to support a first portion of the laptop computer;

a sidewall structure having:

a first inner wall connected with said first platform portion and surrounding the periphery of said first platform portion;

a first outer wall forming an acute angle relative to said first platform portion and surrounding the periphery of said first inner wall;

at least one first spring system connected between said first inner wall and said first outer wall, each of said at least one first spring system including at least one bellow; and

at least one first rib protruding from said first outer wall; and

a second end cap including:

a second platform portion adapted to support a second portion of the laptop computer;

a sidewall structure having:

a second inner wall connected with said second platform portion and surrounding the periphery of said second platform portion;

a second outer wall forming an acute angle relative to said second platform portion and surrounding the periphery of said second inner wall;

at least one second spring system connected between said second inner wall and said second outer wall, each of said at least one second spring system including at least one bellow; and

at least one second rib protruding from said second outer wall.

24. The system of claim 23, wherein each of the at least one first rib and the at least one second rib has an outer face substantially perpendicular to a plane formed by one of the first and second platform portions.

25. The system of claim 23, further comprising:

at least one first bulbous structure formed on the first platform portion; and

at least one second bulbous structure formed on the second platform portion.

26. A system for supporting a plurality of integrated circuits held one or more trays, comprising:

a first end cap including:

a first platform portion adapted to support a first portion of the one or more trays;

a sidewall structure having:

a first inner wall connected with said first platform portion and surrounding the periphery of said first platform portion;

a first outer wall forming an acute angle relative to said first platform portion and surrounding the periphery of said first inner wall;

at least one first spring system connected between said first inner wall and said first outer wall, each of said at least one first spring system including at least one bellow; and

at least one first rib protruding from said first outer wall; and

a second end cap including:

a second platform portion adapted to support a second portion of the one or more trays;

a sidewall structure having:

a second inner wall connected with said second platform portion and surrounding the periphery of said second platform portion;

a second outer wall forming an acute angle relative to said second platform portion and surrounding the periphery of said second inner wall;

at least one second spring system connected between said second inner wall and said second outer wall, each of said at least one second spring system including at least one bellow; and

at least one second rib protruding from said second outer wall.

27. The system of claim 26, wherein each of the at least one first rib and the at least one second rib has an outer face substantially perpendicular to a plane formed by one of the first and second platform portions.



28. The system of claim 26, further comprising:

at least one first bulbous structure formed on the first platform portion; and

at least one second bulbous structure formed on the second platform portion.